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By- Hensel, James W.

A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry. Final Report and Proposal for Research.

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The combined efforts of the U.S. Departments of Agriculture, Commerce, Labor and the Office of Education in addition to those of agricultural educators and leaders were utilized to develop a long-range project for education in agriculture through determining employment opportunities and training needs in farming and off-farm agricultural business and industry. The major end result was the research proposal entitled, "Project Agriculture: A Program for Curriculum Development in Vocational Education." Some specific objectives of the project were: (1) to identify existing major occupational categories and job titles in agricultural businesses and industries, (2) to determine manpower requirements, (3) to develop a master plan for vocational education in agriculture, (4) to develop and conduct pilot training programs, and (5) to provide a mechanism for continual updating of agricultural occupational data. A major purpose of Project Agriculture is to determine the nature and extent of educational needs uniquely associated with employment opportunities in the farm and off-farm agricultural industry and to develop appropriate curriculum programs for each of the seven areas of agricultural instruction in vocational education. The project would serve as a demonstration effort for all areas of vocational education. The project proposal is included. (DM)

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FINAL REPORT
Project No. 7-8459
Grant No. OEG-0-8-078459-1875

A PLANNING STUDY TO DETERMINE THE FEASIBILITY OF A RESEARCH PROJECT CONCERNING EMPLOYMENT OPPORTUNITIES AND TRAINING NEEDS IN FARMING AND OFF FARM AGRICULTURAL BUSINESS AND INDUSTRY

July 1968

U.S. DEPARTMENT OF
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Final Report

Project No. 7-8459
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A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs In Farming and Off-Farm Agricultural Business and Industry.

James W. Hensel

The Center for Vocational and Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio

July 1968

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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Summary

The major purpose of this study was to plan a nationwide project to determine the employment opportunities and training needs in farming and off-farm agricultural business and industry. The planning study enlisted the combined efforts of the U. S. Departments of Agriculture, Commerce, Labor and the Office of Education as well as Agricultural Educators and leaders in the field of Agriculture in developing a long-range project for education in Agriculture.

As a result of the planning grant, a research proposal entitled "PROJECT AGRICULTURE: A Program for Curriculum Development in Vocational Education" was submitted to the U. S. Commissioner of Education for support through authorization of the Bureau of Research. Project Agriculture was submitted on June 26, 1968 and was assigned number 9-0005. According to the award agreement, the proposal constituted the major requirement of the final report.

Introduction

The major purpose of this study was to plan a nationwide project to determine the employment opportunities and training needs in farming and off-farm agricultural business and industry. The planning study enlisted the combined efforts of the U. S. Departments of Agriculture, Commerce, Labor and the Office of Education as well as Agricultural Educators and leaders in the field of Agriculture in developing a long-range project for education in Agriculture.

The specific objectives of the planning project were:

1. To secure joint planning and cooperation toward the national study from the U. S. Departments of Agriculture, Commerce, Education, and Labor, teacher educators, supervisors, school administrators, and the major trade associations in agricultural businesses and industry.

2. To design a proposal which will provide a national focus on the following objectives:

   a. To identify the existing major occupational categories and job titles in agricultural businesses and industries.

   b. To determine manpower requirements in farming and off-farm agriculturally-related occupations.

   c. To develop a master plan for vocational education in agriculture. Segments of the plan could involve course training standards for agricultural job titles including the purposes of the course, qualifications of the graduate on completion of the course, career duties, job elements, and certain proficiency standards.

d. To develop and conduct pilot training programs based on the course training standards concept and to evaluate the job performance of graduates of such training programs.

e. To provide a mechanism for updating agricultural occupational data on a continuing basis.

3. To establish and work with an Advisory Committee in planning the nationwide study.

The planning study grew out of a concern of leaders in Agriculture that future education in agriculture be realistic in the light of actual or anticipated opportunities for gainful employment. Prior to the initiation of the planning study, representatives of the Departments of Health, Education and Welfare, Agriculture, Labor and Commerce and representatives of Agricultural Education and several agricultural trade associations met and expressed the need for a nationwide study to determine the present and future employment opportunities and training needs in farming and off-farm agricultural businesses and industries. The Departments of Agriculture, Labor and Commerce indicated their willingness to cooperate and assist with a planning study and later to cooperate in a national study.

The Center for Vocational and Technical Education was asked to develop a proposal for a planning grant for less than $10,000 which would be submitted to the Bureau of Research, U. S. Office of Education. A proposal entitled "A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry" was submitted to the U. S. Commissioner of Education for support through authorization of the Bureau of Research on June 10, 1967. The notification of grant award was signed by the Assistant Contract Officer, The Ohio State University, on January 18, 1968. No additional funds were requested and the amount for the contract was $9,621.

Methods

Dr. James W. Hensel, Associate Professor and Specialist in Agricultural Education at The Center for Vocational and Technical Education gave leadership as principal investigator for the project.

Dr. Richard H. Wilson, Associate Professor of Agricultural Education, was employed as Project Coordinator by The Center for Vocational and Technical Education on a one-half time basis during the official period of the grant.

The principal investigator (Dr. Hensel) and the project coordinator (Dr. Wilson) worked with all of the agencies to be involved in the national project. Procedures during the contract period included coordinating activities on all levels, between governmental

departments, establish guidelines for the conduct of the study. The proposal was written with assistance from a steering committee and tested through an advisory committee.

The official steering committee provided guidance and direction throughout the conduct of the study. Members of the committee included the following persons. Mr. Linwood Bailey, U. S. Department of Agriculture, Mr. Eldon Cully, U. S. Department of Labor, Mr. H. N. Hunsicker, U. S. Office of Education, Dr. Melvin Janssen, U. S. Department of Agriculture, Mr. Kenneth Norell, U. S. Bureau of the Census, Department of Commerce, Dr. Phil Teske, Division of Adult and Vocational Research, U. S. Office of Education, Mr. Norman DeWeaver, Economic Development Division, U. S. Department of Commerce, Mr. Ed Sheopner, Farm Labor Service, U. S. Department of Labor.

The members of the project staff met with the official steering committee in November, 1967, January, 1968, and held special meetings with the U. S. Departments of Agriculture, Commerce, Labor and officials of the U. S. Office of Education several times during February, March, April, and June.

In March, 1968, Ad Hoc Advisory Committee met in the GSA Building, U. S. Office of Education. The purpose of this meeting was to inform members of the Advisory Committee concerning the progress of the project and to seek suggestions and assistance in writing the final draft. Members attending the Ad Hoc Committee Meeting were as follows: Mr. H. N. Hunsicker, Chief, Ag Education Service, U. S. Office of Education, Dr. Melvin Janssen, Economic Research Service, U. S. Department of Agriculture, Dr. Phil Teske, Division of Adult and Vocational Research, U. S. Office of Education, Mr. Eldon Cully, Bureau of Employment Security, U. S. Department of Labor, Mr. Ed Sheopner, Farm Labor Service, Bureau of Employment Security, U. S. Department of Labor, Mr. Kenneth Norell, Assistant Chief, Agricultural Division, Bureau of the Census, Mr. Linwood Bailey, Agricultural Stabilization and Conservation Service, U. S. Department of Agriculture, Dr. Robert Isenberg, Associate Secretary, American Association of School Administrators, Mr. C. M. Lawrence, Director, Agricultural Education, Division of Vocational and Technical Education, State Department of Education in Florida, Mr. Fred A. Lyman, Staff Secretary, Farm and Industrial Equipment Institute, Professor C. E. Bundy, Department of Agricultural Education, Iowa State University, Mr. Dave Prichard, Program Specialist in Vocational Guidance, U. S. Office of Education, Mr. Floyd Johnson, President of the American Vocational Association, Professor Al Krebs, Department of Agricultural Extension Education, University of Maryland, Mr. George Hyma, Chairman, Educational Committee, Farm and Industrial Equipment Institute, Mr. Willis Dougan, Executive Secretary, American Personnel and Guidance Association, Mr. Ray Brush, Secretary, American Association of Nurserymen, Mr. Hugh Cassel, Superintendent of Schools, Augusta County, Stanton, Virginia.

Following the Ad Hoc Advisory Committee Meeting, a semi-final draft was prepared and distributed to members of the steering committee for review and evaluation. The final draft of PROJECT AGRICULTURE was completed in June and submitted to the U. S. Office of Education June 28, 1968.

Findings and Results

The major result of the planning grant was the proposal entitled "PROJECT AGRICULTURE: A Program for Curriculum Development in Vocational Education" which was submitted to the U. S. Office of Education on June 28, 1968. A copy of the proposal has been appended to this report and according to the contract agreement constitute the findings and result of the planning grant. A brief outline of the proposal entitled "PROJECT AGRICULTURE" follows:

The major purpose of this project is to accomplish a comprehensive and nationwide effort to determine the nature and extent of educational needs uniquely associated with employment opportunities in the farm and off-farm agricultural industry and to develop appropriate curricular programs for each of the seven areas of agricultural instruction in vocational education. The task has been identified and would be accomplished through the cooperative efforts of The Center for Vocational and Technical Education, The Departments of Agriculture, Commerce, Education and Labor. The appropriate capabilities of various research agencies in a number of universities and states throughout the nation would be called upon for efforts coordinated by The Center.

The project will provide a model for all vocational services in the development of nationwide efforts to determine occupational opportunities and training needs. The design of a taxonomy of agricultural occupations and the multi-state effort to develop curriculum guides for areas of occupational instruction in agriculture will provide experience and example for all areas of vocational education. The project would further provide for the development of performance standards and performance tests for assessing the validity and effectiveness of instructional programs in agriculture.

The project has been designed to include four major phases over a five year period. The initial effort will be the development of a taxonomy of job titles arranged by appropriate training programs of agricultural instruction together with a handbook of job descriptions. The second phase will include a census of employment opportunities and training needs in the agricultural industry which would establish a base for curriculum guides and programs for the seven areas of agricultural instruction through the involvement of teachers in design, trial, and revision. The fourth and final phase will provide for curriculum dissemination, research, and renewal through curriculum materials centers for each area.

The U. S. Office of Education has assigned PROJECT AGRICULTURE number 9-0005 and has been officially recorded in the Office of the Bureau of Research. According to the award agreement, submission of the new proposal within the time allottment fulfilled the major requirements of planning grant. The PROJECT AGRICULTURE proposal has been attached as a part of the final report.

OE 6000 (REV. 9-66)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

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101 A Planning Study to Determine the Feasibility of a Research Project Concerning
102 Employment Opportunities and Training Needs in Farming and Off-Farm Agricul-
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Final Report

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601 Agricultural Education
602 Vocational Agriculture
603 Curriculum
604 Off-farm Agricultural Occupations
605
606

607 IDENTIFIERS

800 ABSTRACT
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802 the employment opportunities and training needs in farming and off-farm agricul-
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805 Vocational Education" which has been submitted to the U.S. Office of Education
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809 agricultural industry and to develop appropriate curricular programs for each of
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812 and Technical Education, The U.S. Departments of Agriculture, Commerce, Education
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814 in the development of nationwide efforts to determine occupational opportunities
815 and training needs. The design of a taxonomy of agricultural occupations and the
816 multi-state effort to develop curriculum guides for areas of occupational instruc-
817 tion in agriculture will provide experience and example for all areas of voca-
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820 tiveness of instructional programs in agriculture.
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9 0005

PROPOSAL FOR RESEARCH AND/OR RELATED ACTIVITIES SUBMITTED TO THE U. S. COMMISSIONER OF EDUCATION FOR SUPPORT THROUGH AUTHORIZATION OF THE BUREAU OF RESEARCH

Title: PROJECT AGRICULTURE: A Program for Curriculum Development in Vocational Education

Applicant Organization:
The Center for Research and Leadership Development in Vocational and Technical Education
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Duration of Activity: 1 October 1968 through 30 June 1975

Total Federal Funds Requested: $202,129.20
(Oct. 1, 1968 - June 30, 1969)

Date Transmitted: June 30, 1968

II ABSTRACT

Project Agriculture
A Program for Curriculum Development in Vocational Education

PRINCIPAL INVESTIGATOR: James W. Hensel, Specialist, Agricultural Education
The Center for Vocational and Technical Education
(614) 293-7351

PROJECT COORDINATOR: Richard H. Wilson, Associate Professor, Agricultural Education, The Ohio State University

CONTRACTING AGENCY: The Center for Vocational and Technical Education
The Ohio State University
980 Kinnear Road, Columbus, Ohio 43212

FEDERAL FUNDS REQUESTED: $202,129.20 - Oct. 1, 1968-June 30, 1969

PROJECT DURATION: October 1, 1968 to June 30, 1975

STATEMENT OF THE PURPOSES:

The major purpose of this project is to accomplish a comprehensive and nationwide effort to determine the nature and extent of educational needs uniquely associated with employment opportunities in the farm and off-farm agricultural industry and to develop appropriate curricular programs for each of the seven areas of agricultural instruction in vocational education. The task has been identified and would be accomplished through the cooperative efforts of The Center for Vocational & Technical Education, The Departments of Agriculture, Commerce, Education & Labor. The appropriate capabilities of various research agencies in a number of universities and states throughout the nation would be called upon for efforts coordinated by The Center.

EXPECTED CONTRIBUTION TO EDUCATION:

The project will provide a model for all vocational services in the development of nationwide efforts to determine occupational opportunities and training needs. the design of a taxonomy of agricultural occupations and the multi-state effort to develop curriculum guides for areas of occupational instruction in agriculture will provide experience and example for all areas of vocational education. The project would further provide for the development of performance standards and performance tests for assessing the validity and effectiveness of instructional programs in agriculture.

PROCEDURES OR DESCRIPTION:

The project has been designed to include four major phases over a five year period. The initial effort will be the development of a taxonomy of job titles arranged by appropriate training programs of agricultural instruction together with a handbook of job descriptions. The second phase will include a census of employment opportunities and training needs in the agricultural industry which would establish a base for curriculum development. The third phase would include the development of curriculum guides and programs for the seven areas of agricultural instruction through the involvement of teachers in design, trial, and revision. The fourth and final phase will provide for curriculum dissemination, research, and renewal through curriculum materials centers for each area.

III - THE PROPOSAL

PROJECT AGRICULTURE

A PROGRAM FOR CURRICULUM DEVELOPMENT IN VOCATIONAL EDUCATION

A. Statement of the Problem

The major purpose of this project is to accomplish a nationwide effort to determine the nature and extent of educational needs uniquely associated with employment opportunities in the farm and off-farm agricultural industry and to develop appropriate curricular programs for the areas of agricultural instruction in vocational education. The task would be accomplished through the cooperative efforts of The Center for Vocational and Technical Education, the U. S. Departments of Agriculture, Commerce, Education, and Labor, and agencies of research and development throughout the nation. Further, there is a need for a curriculum planning model which will provide for the articulation of content within programs and levels of training in agriculture as well as between the vocational service areas.

Rationale and Need

The rapidly growing vocational and technical education system of the nation is making increasingly necessary more precisely defined information concerning the nature and extent of employment opportunities and the educational programs uniquely suited for employment preparation. Up to this time there has been no national effort to pursue the development of curricula for any of the areas of vocational education as has occurred for physics, biology and mathematics. A project is needed which will provide for a national allocation of resources to accomplish a program of broader validity than would result if patterns of state by state development were followed. This project is proposed as one which may provide experience and pattern for the evolution of such a model.

As the character of the agricultural industry has changed from an almost total agrarian complex to an agrarian-industrial complex, the nature and scope of appropriate educational programming for agricultural occupations has also changed. The mechanization of agriculture and the explosion in the number and complexity of agricultural occupations rapidly changes training needs. Teachers find increasing difficulty in keeping curriculum up-to-date and relevant. As a consequence there is need for a re-assessment of the extent and nature of that agricultural employment requiring competence in agricultural knowledge and skills. The need for such information becomes additionally critical as the basis for state educational programs. No individual school has the resources for such study and no individual state study can incompass the breadth needed for nationwide decision making.

The 1966 revision of the Vocational Education Bulletin Number 1, "Administration of Vocational Education--Rules and Regulations," includes

specific rules and regulations for agricultural education.[1] Paragraphs 104.60 and 104.61 serve as a mandate for this proposal.

104.60 Vocational education in agriculture.

Vocational education in agriculture under the state plan shall be designed to meet the needs of persons over 14 years of age who have entered upon or are preparing to enter: (a) Upon the work of the farm or farm home, or (b) any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work of the farm or of the farm home.

104.61 Agricultural occupations defined.

An agricultural occupation means an occupation involving knowledge and skills in agricultural subjects, which has the following characteristics:

(a) The occupation includes the functions of producing, processing, and distributing agricultural products and includes services related thereto.

(b) The occupation requires competencies in one or more of the primary areas of plant science, soil science, animal science, farm management, agricultural mechanization, and agricultural leadership.

There is no common agreement among the U. S. Departments in Washington, teacher educators and supervisors in agricultural education and personnel of the agricultural industry in general as to which occupations actually require knowledge and skills in agricultural subjects. Most states have made studies of the agricultural occupations but no consistent analyses concerning these occupations has had nationwide exposure and agreement. Therefore there is a continuing need for occupational study and task analysis as a basis for job description and curriculum structure.

Again, in the Vocational Education Bulletin Number 1 within the section which concerns all vocational education programs and services, there is further additional support for a study of the agricultural skills and knowledges needed in agricultural occupations.[2]

Section 104.13 follows:

(h) Soundness and quality of instruction. The following standards will be followed to assure soundness and quality of instruction designed to fit individuals for an occupational objective:

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[1] U. S. Office of Education, Vocational Education Bulletin Number 1, Administration of Vocational Education--Rules and Regulations. U. S. Government Printing Office, Washington, D. C., 1966.

[2] Ibid. p. 17-18.

(1) The program of instruction will be based on a consideration of the skills and knowledge required in the occupation for which the instruction is being provided, and include a planned logical sequence of those essentials of education or experience (or both) deemed necessary for the individual to meet his occupational objectives.

(2) The program of instruction will be developed and conducted in consultation with potential employers and other individuals or groups of individuals having skills in the substantive knowledge of the occupation or occupational field representing the occupational objective.

(3) The program of instruction will include the most up-to-date knowledge and skills necessary for competencies required in the occupation or occupational field in which the individual is being prepared or upgraded or updated.

(4) The program of instruction will be sufficiently extensive in duration and intensive within a scheduled unit of time to enable the student to develop competencies necessary to fit him for employment in the occupation or occupational field for which he is being trained.

(5) The program of instruction will combine and coordinate related instruction with field, shop, laboratory, cooperative work, or other occupational experience which (i) is appropriate to the vocational objectives of the students, and (ii) is of sufficient duration to develop competencies necessary to fit him for employment in the occupation or occupational field for which he is being trained, and (iii) is supervised, directed, or coordinated by a person qualified under the state plan.

The rules and regulations explicitly point out the need for definitive information concerning the occupations for which a student is being trained. Leaders in vocational agriculture are familiar with the educational requirements for a student who plans to farm. However, as the program has expanded to include the many related occupations requiring knowledge and skills in agricultural subjects, the direction has not been as clear. To insure future instructional programs in agricultural education which are sound and of high quality, there must be further definition as to occupational opportunities and training needs. A national effort must be initiated which would study the problem on a broad scale, taking previous research as the first step. The capability of a number of agencies should be brought to bear in a joint research program.

Review of Literature and Related Research

Agriculture, in common with other business and industry, has experienced rapid and continual change. This has resulted in misconceptions and questions as to what the term "agriculture" includes and implies.

"At one time farming and agriculture meant the same, but this is no longer true. Today, agriculture not only includes farming and farm management, but also many businesses and industries that produce goods and services which the farmer uses to raise his livestock and grow his crops. Agriculture also includes industries which sell raw and processed farm products to the consumer. This whole complex of activities is often called agribusiness."[3]

The character of agricultural employment is changing rapidly with the off-farm agricultural occupations becoming the major segment of the field. There are vast numbers of career opportunities in agriculture in many different areas.

"Agriculture as a whole is a $100 billion industry, employing up to 35 percent of our nation's labor force and offering thousands upon thousands of jobs each year for youth who have appropriate training and education in agriculture. These career opportunities are many and diverse in nature."[4]

Agriculture is a dynamic and changing industry which is basic to the progress of the Nation. In order to maintain this important role, agriculture requires the services of competent and dedicated workers. Some of these are engaged in production agriculture, or farming; many work in nonfarming agricultural occupations to provide the supplies and services that farmers need, and transport, market and process the products of the farm. Increasingly complex educational needs are developing not only for farmers, but also for those who will be employed in the nonfarm occupations which involve knowledge and skills in agricultural subjects.

While there has been a decrease in the number of family owned and operated farms, such farms, are now larger and involve highly specialized mechanization and management. The need for special skills extends today to the hired farmworker. Preparation for farming and other agricultural occupations requires new patterns of education and training. Therefore, objectives for vocational and technical education in agriculture must be restated to reflect emerging comcepts and changes in the occupational needs of workers.

The major program objectives for vocational and technical education in agriculture have been revised to meet the needs of the changing times. The new objectives which illustrate a growing awareness for the occupations related to the field of agriculture are:[5]

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[3]Richard M. Swenson. The Agriculture Industry. The Encyclopedia of Careers and Vocational Guidance. Volume I. Doubleday & Company, Inc., Garden City, New York, 1967, p. 75.

[4]Ibid. p. 77.

[5]Objectives for Vocational and Technical Education in Agriculture, U. S. Dept. of Health, Education, & Welfare OE-81011, Bulletin 1966, No. 4.

1. To develop agricultural competencies needed by individuals engaged in or preparing to engage in production agriculture.

2. To develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations other than production agriculture.

3. To develop an understanding of and appreciation for career opportunities in agriculture and the preparation needed to enter and progress in agricultural occupations.

4. To develop the ability to secure satisfactory placement and to advance in an agricultural occupation through a program of continuing education.

5. To develop those abilities in human relations which are essential in agriculture occupations.

6. To develop the abilities needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities.

The ultimate objective of vocational and technical education is to prepare youth and adults for successful and satisfying employment. The passage of the Vocational Education Act of 1963 was a direct response to the national realization of the importance of trained manpower. In the declaration of purpose, the Act established as a national objective that persons of all ages, backgrounds, and ability levels should have "ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training."[6]

The research proposal presented here has grown out of a concern in the broad field of agriculture, for the training which is "realistic in the light of actual or anticipated opportunities for gainful employment."

The National Center for Advanced Study and Research in Agricultural Education provided early leadership in the field of agricultural education as it began emphasizing nationwide objectives for studies in the off-farm agricultural occupations as early as 1962. National seminars were sponsored by The Center and in 1963 The Center, with the cooperation of the U. S. Office of Education, conducted a major review and synthesis of agricultural occupations studies in each of the states.

Building on this data in 1964, The Center was granted funds through the U. S. Office of Education to conduct a research project entitled "A Determination of Needed Adjustments and Extensions in the Curricular Patterns of Vocational Education in Agriculture," OE-5-85-009. The major objectives of the study were: (1) to identify the major occupations which require competency in agriculture; (2) to determine the agricultural

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[6]Op. Cit.

competencies needed by workers in these occupations; (3) to cluster the major agricultural occupations which require similar competencies; (4) to develop and refine the curricular guides and supporting materials which are most needed and feasible for the major clusters of agricultural occupations; (5) to examine the summary data for other implications in redirecting vocational agriculture (e.g., programs for disadvantaged youth, needed adjustments inadministrative and supervisory procedures); (6) to train key state leaders in the use of the curricular guides and supporting materials.

The project conducted at The Center for Vocational and Technical Education, individual state studies, and The Center summary of the 25 state studies have provided the field of agricultural education with an initial entry and insight into further research in the area of the off-farm agricultural occupations.[7] There has been much research activity in the area of the off-farm agricultural occupations over the past 3-5 years. However, at this time, no studies have been attempted which would encompass a nation-wide effort concerning the objectives of the project envisioned.

The Curricula of Agricultural Education

Seven primary areas of agricultural instruction have been established with the development of a USOE "Cooperative Project for Standardization of Terminology in Instructional Programs of Local and State School Systems." These areas are Agricultural Production, Agricultural Mechanics, Agricultural Products, Horticulture, Agricultural Supplies, Agricultural Resources and Forestry. They are the result of a number of meetings of an ad-hoc committee on agriculture which was convened in conjunction with the Project on Standard Terminology.[8]

These instructional areas for agriculture have already been adapted by the Department of HEW for reporting purposes. Therefore, it is reasonable to expect schools to offer vocational instruction programs which may be identified within one or more of the areas. This being so, it becomes imperative that curriculum guides and programs of curriculum content be developed.

In order for such programs to have wide acceptance as appropriate and valid, it is important that a broadly representative segment of the agricultural education profession have a part in the development program. This project is designed to answer these needs. In so doing it will provide a guide to the later development of curriculum projects for other areas of vocational agriculture.

The Steering Committee

A Planning Committee for Study of Employment Opportunities and Training, instituted by the U. S. Office of Education has been in existance since 1966. This committee has been composed of representatives appointed by Administrators in the Departments of Health, Education, and Welfare, Agriculture,

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[7] Summary of Research Findings, The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, August, 1965.

[8] "Standard Terminology for Instruction in Local and State School Systems" State Educational Records and Reports Series: Handbook VI (Preliminary Edition) U. S. Department of Health, Education and Welfare, Office of Education, Washington, D.C., May 1967.

Commerce and Labor. Throughout many of the developmental steps leading up to this proposal, this body has functioned as a Steering Committee. The Committee first met in August of 1966 and has since met a number of times to provide counsel and guidance to the plans for this project. Representation on the committee is illustrative of the concern shared by these Departments of government for the manpower training problems with which this project deals. The cooperation of these agencies will aid in the accomplishment of the project and plans have been made to continue the Steering Committee through to the completion of Project Agriculture.

Acting upon the recommendations of the Steering Committee a feasibility study was instituted. The purpose of that study was to consider the needs and the possible procedures which would provide answers to many of the needs earlier identified by the Committee. This project proposal is the product of that study.

The Advisory Committee

As a final prelude to the preparation of this proposal an ad-hoc Advisory Committee was assembled. This committee was composed of representatives of four U. S. government departments, agricultural trade associations, guidance personnel, school administration, and vocational education. This committee heard the planned efforts outlined in this proposal and made suggestions to strengthen the overall project. It is planned that a similar committee would be convened from time to time in the course of Project Agriculture.

The Objectives

The major purpose of this project is to accomplish a comprehensive and nationwide effort to determine the nature and extent of educational needs uniquely associated with employment opportunities in the farm and off-farm agricultural industry and to develop appropriate curricular programs for each of the seven areas of agricultural instruction in vocational education.

Multiple facets of Project Agriculture would involve the accomplishment of several specific objectives:

1. To organize a taxonomy of job titles and develop job descriptions.

   (a) To identify existing major occupational categories and job titles and develop a logical schematic arrangement of these in relation to appropriate areas of agricultural instruction.

   (b) To gather job descriptions into a handbook useful in guidance and in determining training needs and performance standards.

2. To determine current and projected manpower requirements in the agricultural industry, farm and off-farm.

   (a) To develop and plan a census of the total employment complex of the dynamic agricultural industry analyzed by appropriate areas of agricultural instruction.

(b) To explore the potential for the continued periodic projection of the number of individuals employed in positions where agricultural knowledge is a unique condition of employment via a mathematical model for computer programming.

3. To evolve guidelines for the development of curricula which will enable persons to be prepared for employment and increased competence in agricultural occupations.

4. To establish a design and a mechanism for the dissemination, evaluation, adjustment, and renewal of curricular programs for vocational and technical education in agriculture.

B. Procedures

Project Agriculture is seen as a massive effort at occupational study and curriculum development for the agricultural industry. The project design calls for a breakout into four major phases each of which will project into several subphases. The accumulative load of all phases and their sub-projects is more than should be undertaken as one research effort by a single research agency. Therefore, appropriate sub-projects have been developed and structured so that a number of different research agencies may participate.

It was believed the involvement of several institutions in the design and development of the various phases would result in a higher degree of acceptance of the ultimate results. Participation in coordinated sub-projects by several institutions would provide the advantages of a greater resource of educational talent than could ordinarily be assembled in a single location for a project of this nature. The total effort will be coordinated by The Center for Vocational and Technical Education. Appropriate sub-projects would be contracted to research agencies particularly suited for the task to be performed. It is expected that institutions in ten or more states will ultimately be involved in conducting specific sub-projects. While efforts to accomplish all phase sub-projects would be independent, interrelation would be maintained, and appropriate coordination would be developed through efforts of The Center coordinating staff. The final achievement of Project Agriculture will result from the accumulative development of each of the sub-projects.

Phase I A: A TAXONOMY OF AGRICULTURAL OCCUPATIONS

The Phase IA sub-project will result in the development of a taxonomy of agricultural occupations arranged according to appropriate instructional areas. After contracting, this sub-project would begin with the development of a project staff and the organization and planning of the project activities. First efforts of the project staff would be given to a review of research and literature regarding agricultural occupational job titles. A continuing search of the Dictionary of Occupational Titles, and a review of the Standard Industrial Code should result in an updated list of occupational titles. The staff would conduct a review of the agriculture industry for overlooked, new, and embryonic occupations or positions. The staff would call a consultant conference of persons from the agricultural industry and agricultural education to further project agricultural occupations not already listed.

The staff would develop criteria for categorizing and clustering agricultural occupations according to appropriate areas of agricultural instruction. Efforts would be made to group agricultural job titles by common educational needs and by educational areas. The new outlines of agricultural instruction areas in the HEW Standard Terminology for Instruction would be reviewed.[9] The agricultural job titles already listed would now be arranged according to appropriate instructional areas defined by the Standard Terminology for Instruction handbook.

The final schematic arrangement of agricultural job titles by appropriate agricultural instructional areas would be published as a taxonomy of Agricultural Occupations. It would become a basic aid to the accomplishment of Phase IB. Because much preliminary work has already been accomplished in this area, the Phase IA sub-project should be completed within approximately one year from start. A sequential presentation of the events and completion dates for Phase IA is presented in the time schedule of this proposal.

Phase I B: A HANDBOOK OF AGRICULTURAL JOB DESCRIPTIONS

Phase IB would be contracted approximately six months after the start of Phase IA. Three months later the staff would be organized and plans would be made for the development of the sub-project activities. A broad design for the sub-project calls for an organized and coordinated effort to accumulate job descriptions resulting from on-site observations at appropriate locations throughout the states.

Each agricultural job would be described by five or more surveyors on the basis of widely separated on-site observations. Job description survey team members would be drawn from the teachers of vocational agriculture in each of the states. These persons are considered uniquely suited as they are college trained and they are specialists in vocational education. They also have a broad acquaintance with the agricultural industry. After instruction in the techniques of task analysis and job description each should provide expert service in job description. Each state would have a

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[9] Ibid.

coordinator who would have received preparation for the effort at regional seminars.

Job descriptions would be arranged according to appropriate areas of agricultural instruction. The overall development of the job description handbook would be guided by consultation with guidance and educational personnel. The project would be finalized with the publication of a handbook and the subsequent conference of state vocational guidance personnel at which the use of the handbook would be explored.

A final task of the Phase I B sub-project staff would be the refinement and revision of the Taxonomy which grew out of efforts of Phase I A. A presentation of the events and estimated completion dates is given in the time schedule of this proposal.

Phase II A: AGRICULTURAL OCCUPATION OPPORTUNITY CENSUS

Phase II A amounts to a massive agricultural occupation opportunity census. It would constitute an effort to determine the location and nature of agricultural employment throughout the country. This would be accomplished under the direction of a sub-project staff which would organize and develop a plan for sampling and surveying the agricultural employment pattern of the nation.

Any agricultural occupation employment census will be difficult to achieve within the resources likely to be available. The design of this sub-project calls for following a sample pattern already developed and tested by a research agency in one of the states.[10] The design calls for securing all possible lists of agricultural employers in all states and drawing a given sample from this comprehensive list. It may be determined best to omit farm employment since this can be determined from existing census data. A survey instrument would be administered to agricultural employers in each state. The survey instrument would request a report of employees in positions calling for agricultural knowledge under one of the seven areas of agricultural instruction. Detailed events to be accomplished by the Phase IIA sub-project staff are reported in the time schedule of the proposal.

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[10]Nebraska Occupational Opportunities Inventory, Nebraska RCU, 1968.

Phase II B: AN EXPLORATION OF THE FEASIBILITY OF A MATHEMATICAL PROGRAMMING MODEL FOR PROJECTION OF AGRICULTURAL EMPLOYMENT BY AREAS OF AGRICULTURAL INSTRUCTION

This sub-project is a logical extension of the needs growing out of the accomplishment of Phase II A, The Agricultural Occupational Census, recognizing that any census effort is complete only for a given period in time. There is an identified need for a continuing means of projecting the agricultural occupational and employment pattern. Studies in this direction have been made by the U. S. Department of Labor.[11] It is thought this may best be achieved through the development of a mathematical model and computer program for the projection of agricultural employment opportunities.

Preliminary work in this direction has already been accomplished by researchers in Iowa.[12] It is proposed that an exploratory effort be made to determine if the design already developed by these research efforts would be modified so as to allow the projection of agricultural employment by instructional areas in agriculture, by economic regions of the states, and by states of the United States.

A brief summary of the major events for Phase IIA is given in the time schedule of this proposal.

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[11]Tomorrow's Manpower Needs, Preliminary Draft Copy, Bureau of Labor Statistics, U. S. Department of Labor, pp. 685-753.

[12]Manpower Requirements and Demand in Agriculture by Regions and Nationally, With Estimation of Vocational Training and Educational Needs A Productivity, Heady, Earl O. and Arcus, Peter, Contract No. O.E. 5-85-108, Iowa State University, Ames, Iowa, November, 1966.

Phase III A, B, C, D, E, F, G: THE DEVELOPMENT OF CURRICULUM FOR EACH AREA OF AGRICULTURAL INSTRUCTION

Phase III of Project Agriculture establishes the overall design for seven different areas of curriculum development. Guides for instruction and curricula would be developed for each of the areas of agricultural instruction which are as follows: Agricultural Production, Phase IIIA; Agricultural Supplies, Phase IIIB; Agricultural Mechanics, Phase IIIC; Agricultural Production, Phase IIID; Horticulture, Phase IIIE; Agricultural Resources, Phase IIIF; Forestry (production), Phase IIIG. Each of these efforts would be proposed as a sub-project to be completed by a research agency most appropriately at a university in some one of the states. A common pattern of curriculum development would be followed by each of the seven project staffs and the entire effort would be coordinated through the agency of The Center coordinating staff. The broad design for curriculum development evolves from the concept of occupational task analysis and the development of performance competence. The curriculum development effort would have a massive impact upon the agricultural education teaching practice throughout the states because it would call for the involvement of teacher task forces for each of the areas of agricultural instruction during each summer of four subsequent years. The involvement of many state staff and teachers of agricultural education at these stages should provide for the development of a realistic curriculum which will be more readily adapted. The sequence of events for Phase III is presented in the time schedule section of this proposal.

Phase IV: A MECHANISM FOR CURRICULUM DISSEMINATION AND RENEWAL

Phase IV concerns the establishment of instructional materials centers for dissemination and renewal of curriculum materials for each area of agricultural instruction. Some agricultural instruction materials centers already exist. Most of these have broad general concern. Some are already specialized for a given area of agricultural instruction. It is logical that the latter may accept responsibility for the continuing reproduction and preparation of materials for their area of concern. Others of the more general materials centers might be asked to accept responsibility for one of the areas of agricultural instruction or it may prove to become more feasible to create some new instructional materials centers with specialized responsibilities.

During the final year of Phase III when curriculum development efforts near completion, instructional materials centers should be contracted and instructional materials developed for each of the areas of agricultural instruction. The instructional materials centers would develop broad plans for the establishment of state and regional demonstration instructional centers (schools) for their specific area of agricultural instruction. In many cases these regional demonstration instructional centers might represent a continuation of the centers in which curriculum development efforts occurred during Phase III.

In each of the curriculum materials centers a Curriculum Research and Development Task Force would be established for the given instructional area. Each curriculum research and development task force would have the responsibility for developing a procedure, process and mechanism for continued curriculum adjustment and renewal based upon a continued surveillance of the agriculture industry with attention to developments which would impact upon a specific area of agricultural curriculum. Means would be established for the development of surveys and the holding of seminars which would provide the mechanism for accumulating information concerning change which should influence curriculum. Provision would be made for the periodic assembly of national study groups which would have concern for the refinement and renewal of each agricultural instruction area.

PROJECT AGRICULTURE: CENTER COORDINATING STAFF

The overall coordination of Project Agriculture will be a responsibility of The Center for Vocational and Technical Education. It will be necessary for The Center for Vocational and Technical Education to employ additional staff with sole concern and responsibility for the coordination of Project Agriculture. The Center and the Project staff would have responsibility for contracting each of the phases and the coordination of all efforts, the review of sub-projects in progress, and the periodic preparation of progress reports and the preparation of the final report on Project Agriculture. To assure the fulfillment of the objectives of Project Agriculture the Center coordinating staff will consult with the Steering Committee and The Executive Advisory Committee.

For purposes of professional communications, periodic meetings will be called for an ad hoc advisory committee which will consist of the members of the Steering Committee plus additional representatives from the educational profession, from the guidance profession, and from the agricultural industry. Such a committee has already exercised influence upon the preparation of this proposal for Project Agriculture.

In order that the monitoring of Project Agriculture and the coordination of the project may be competently maintained, provision is made for the activities of the Center coordinating staff to include many conferences involving the directors of a number of sub-projects, many on-site reviews of individual project efforts and numerous conferences with individual sub-project staffs, as well as several national conferences called to secure the benefits of suggestions from persons in the agricultural industry and in the educational profession.

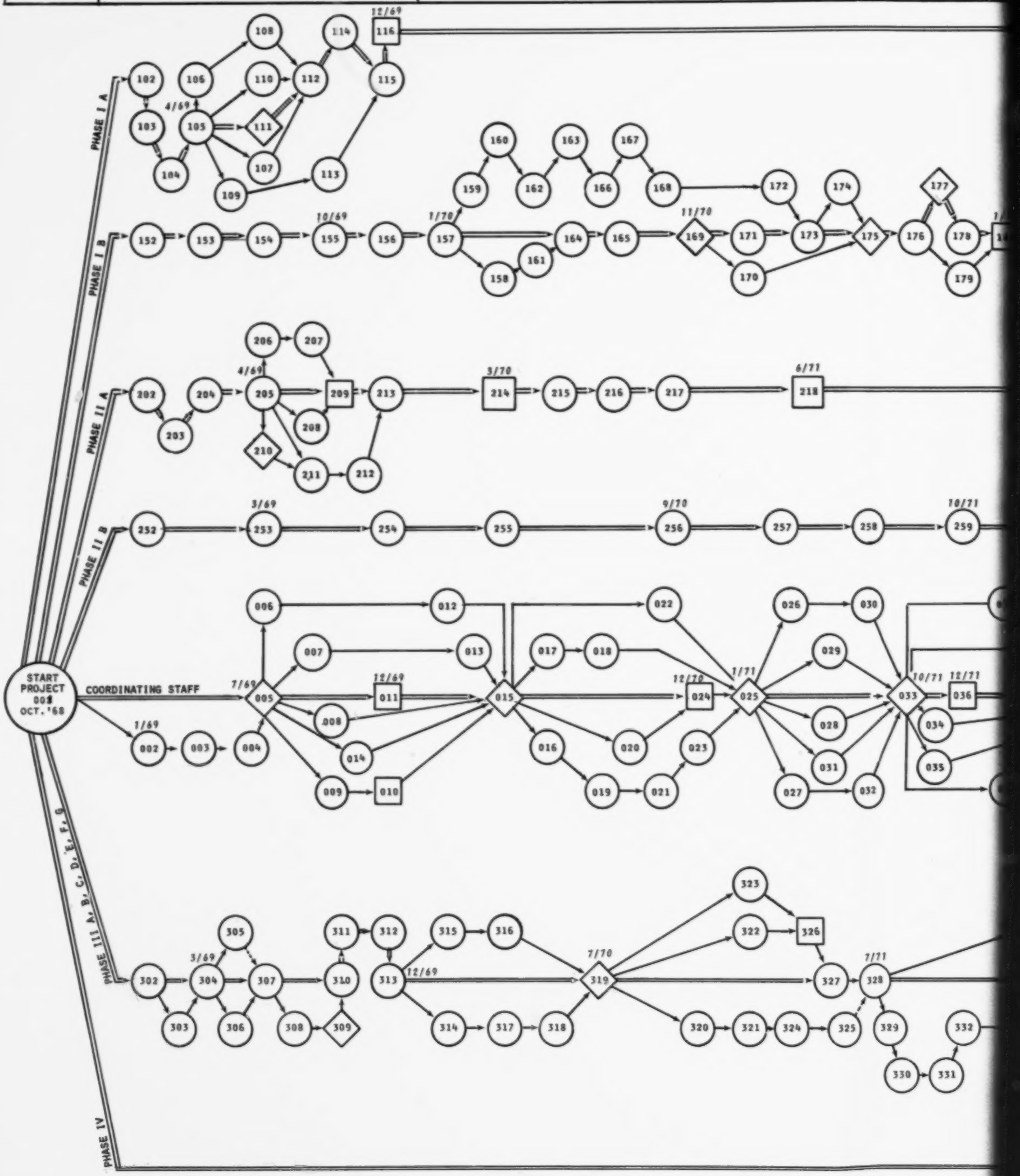
Since The Center for Vocational and Technical Education will have the responsibility for contracting the sub-phases of Project Agriculture, the Center coordinating staff would be augumented of an account clerk who would aid in the administration of the program. The expenditure of funds for sub-projects would be approved for contractors up to the amount of the sum requested on the sub-project budget. Subsequently, contractors would be reimbursed by The Center upon presentation of evidence of approved expenditures. Since the budget for The Center coordinating staff activities will carry its own overhead, it is contemplated that the full overhead allowance for each of the sub-projects would be passed on to the respective contracting agency. In estimating the budgets for the initial years of Project Agriculture, the precise overhead figures which would be appropriate to each are unknown since the various sub-contracting agencies are at the present unknown. Therefore, in the estimation of sub-project budgets that overhead figure presently applicable to efforts of The Center for Vocational and Technical Education, and thus to the Center budget for Project Agriculture, has been used for each of the sub-project estimates. While only gross estimates of the budget for Project Agriculture can be developed for the later years of the project, an analysis of the year by year activities makes evident that the accumulative budget for Project Agriculture will be heaviest in the second and third years of the project and tend to decrease in the fourth and fifth years.

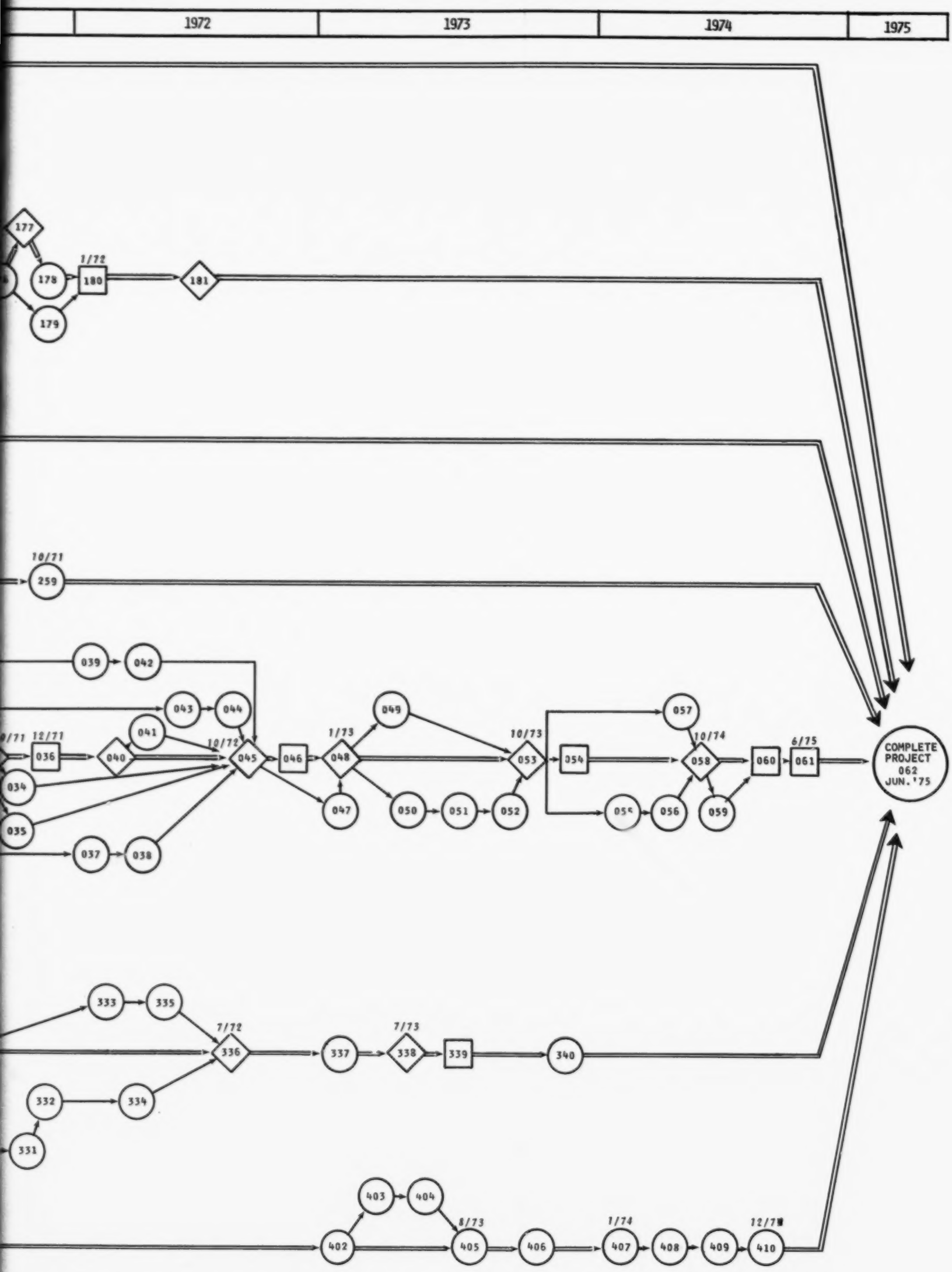
A comprehensive list of major activities of the Center coordinating staff are presented in later pages together with the PERT chart for Project Agriculture.

Time Schedule

The estimated time schedule for the development and completion of various phases of project agriculture is best revealed by the PERT master network for the project on page . All events descriptions for each of the phases are provided in pages following the master network. The events descriptions provide estimated completion times for each of the phase sub-projects.

PROJECT AGRICUL

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PROJECT AGRICULTURE

CENTER COORDINATING STAFF - MAJOR ACTIVITIES

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
002	January, 1969	Assemble central coordinating staff
003	January, 1969	Contract Phase I-A; Phase II-A; II-B; Phase III-A, B, C, D, E, F, & G
004	May, 1969	Coordinating conference all Phase Project Directors
005	July, 1969	Steering Committee Meeting
006	July, 1969	Contract Phase I-B
007	September, 1969	Confer with staff Phase II-B
008	October, 1969	Coordinating conference Phase I-B, Phase III-A, B, C, D, E, F, & G Project Directors
009	October, 1969	Conference with staff Phase I-A
010	December, 1969	Receive report Phase I-A
011	December, 1969	Complete Project Agriculture report of progress
012	January, 1970	Confer with staff Phase I-B
013	February, 1970	Consult with staff Phase II-B
014	April, 1970	Complete on-site reviews of all phase individual projects
015	April, 1970	Steering Committee Meeting
016	May, 1970	Coordinating Conference Phase III Project Directors
017	May, 1970	Confer with staff Phase I-B Project
018	June, 1970	Attend regional meetings of state coordinators Phase I-B Job Description Survey
019	July, 1970	Review Teacher Task Force workshops Phase III-A, B, C, D, E, F, & G

Event No.	Completion Date	Event
020	September, 1970	Confer with staff Phase II-A, plan report
021	October, 1970	Coordinating conference directors Phase III-A, B, C, D, E, F, & G
022	October, 1970	Confer with staff Phase II-B
023	November, 1970	Conference directors all Phase Project
024	December, 1970	Prepare progress report
025	January, 1971	Advisory Committee Meeting
026	April, 1971	Complete on-site reviews of individual Phase efforts
027	May, 1971	Coordinating conference, Phase III Project Directors
028	June, 1971	Consult with director, Phase I-B Project
029	June, 1971	Consult with director, Phase II-B Project
030	June, 1971	Receive Phase II-A report
031	July, 1971	Review Phase III Teacher Task Force curriculum workshops
032	October, 1971	Coordinating conference directors Phase III-A, B, C, D, E, F, & G
033	October, 1971	Steering Committee Meeting
034	November, 1971	Conference directors all Phase Projects in progress
035	November, 1971	Receive Phase II-B report
036	December, 1971	Prepare progress report
037	January, 1972	Receive Phase I-B report
038	February, 1972	Study refinement of Taxonomy with Phase I-B Staff
039	March, 1972	On-site review of Phase III Curriculum Centers

Event No.	Completion Date	Event
040	April, 1972	Advisory Committee Meeting
041	May, 1972	Attend Conference Vocational Guidance Counselors
042	May, 1972	Coordinating Conference Phase III Project Directors
043	July, 1972	Attend Phase III teacher institutes
044	September, 1972	Review Curriculum Trial Centers
045	October, 1972	Steering Committee Meeting
046	December, 1972	Prepare progress report
047	January, 1973	Contract Phase IV Instructional Material Centers
048	January, 1973	Steering Committee Meeting
049	April, 1973	Review Phase III Curriculum Development Centers
050	July, 1973	Attend Phase III curriculum revision workshops
051	August, 1973	Review revised curricula
052	September, 1973	Coordinating conference instructional centers
053	October, 1973	Steering Committee Meeting
054	December, 1973	Prepare progress report
055	January, 1974	Conference of materials centers R & D staff
056	April, 1974	Conference materials center & RCU Personnel
057	July, 1974	Curriculum renewal conference
058	October, 1974	Steering Committee Meeting
059	November, 1974	Complete Curriculum renewal plan
060	December, 1974	Prepare progress report
061	June, 1975	Publish final report
062	June, 1975	End Project Agriculture

PROJECT AGRICULTURE: PHASE I-A

TAXONOMY OF AGRICULTURAL OCCUPATIONS

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
102	January, 1969	Contract Phase I-A
103	January, 1969	Develop job descriptions and announce positions for Phase I-A staff
104	March, 1969	Recruit and interview initial staff
105	April, 1969	Organize, staff and plan project activity
106	May, 1969	Review research and literature regarding agricultural occupational job titles
107	June, 1969	Search Dictionary of Occupational Titles and review Standard Industrial Code
108	June, 1969	List and validate occupational job titles from research studies completed
109	June, 1969	Review and outline agricultural instruction according to HEW Standard Terminology Instruction
110	July, 1969	Conduct review of agricultural industry for overlooked, new and embryonic positions
111	July, 1969	Hold consultant conference for agricultural occupation
112	August, 1969	Consolidate list of agricultural job titles assembled from all sources
113	October, 1969	Develop criteria for categorizing and clustering agricultural occupations
114	November, 1969	Group agricultural job titles by common educational needs
115	December, 1969	Organize agricultural job titles by instructional areas
116	December, 1969	Publish schematic arrangement of agricultural job titles by appropriate agricultural instructional areas

PROJECT AGRICULTURE: PHASE I-B

HANDBOOK OF AGRICULTURAL JOB DESCRIPTIONS

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
152	July, 1969	Contract Phase I-B to develop job description survey and guidance handbook
153	August, 1969	Develop job descriptions and announce positions for Phase I-B staff
154	September, 1969	Recruit and interview initial staff
155	October, 1969	Organize staff and plan project activity
156	December, 1969	Design plan for national job descriptions survey
157	January, 1970	Develop operational procedure for state and regional description survey
158	February, 1970	Develop techniques for conducting job description survey
159	February, 1970	Develop plan for logical allocation of survey assignments to appropriate state survey teams
160	February, 1970	Prepare, distribute overview of project and request cooperation of state personnel
161	March, 1970	Develop guide for written content of job description summary
162	March, 1970	Secure cooperation of state agencies of agricultural education and RCU
163	March, 1970	Secure appointment of state coordinators of survey reporting teams
164	April, 1970	Prepare handbook for survey personnel
165	May, 1970	Develop survey personnel training program
166	May, 1970	Hold regional meetings for state coordinators of survey reporting teams

Event No.	Completion Date	Event
167	June, 1970	State selection, organization and training of survey teams
168	July, 1970	Initiate and conduct surveys of specific agricultural jobs
169	November, 1970	Guidance consultant -- Educator Task Force meeting
170	May, 1971	Develop format for job description handbook
171	May, 1971	Supervise and complete national job description survey
172	June, 1971	Report job descriptions to state coordinators of survey reporting teams
173	June, 1971	Assemble job description reports from all state coordinators
174	July, 1971	Conduct editorial analysis and group job description summary by appropriate agricultural training programs
175	August, 1971	Conduct review by guidance consultant panel
176	October, 1971	Assemble initial draft of agricultural occupations handbook
177	October, 1971	Review handbook draft by project agriculture steering committee
178	November, 1971	Final handbook editing
179	November, 1971	Develop publication plans in consultation with instructional materials centers
180	January, 1972	Publish final handbook with provisions for renewal
181	May, 1972	Conference of State Vocational Guidance Personnel

PROJECT AGRICULTURE: PHASE II-A

NATIONAL SURVEY OF AGRICULTURAL EMPLOYMENT OPPORTUNITIES

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
202	January, 1969	Contract Phase II-A
203	January, 1969	Develop job description and announce positions for Phase II-A
204	March, 1969	Recruit and interview and staff Phase II-A
205	April, 1969	Organize staff and plan project activity
206	April, 1969	Determine target population to be surveyed
207	May, 1969	Develop preliminary operational procedure for employment opportunities survey
208	May, 1969	Develop techniques for conducting employment opportunities survey
209	June, 1969	Develop and pretest survey instrument
210	July, 1969	Conference consultants from agricultural industry and agricultural education
211	September, 1969	Locate sources, secure access to information and arrange for development employee list
212	September, 1969	Plan sampling procedure to be used and determine final list of sampled population
213	October, 1969	Complete final development of operational plan for agricultural employment opportunities - survey
214	March, 1970	Complete survey
215	May, 1970	Review and validate responses; arrange data processing procedure
216	October, 1970	Tabulate and record data
217	December, 1970	Analyze and interpret survey data
218	June, 1971	Prepare and publish results of survey of agricultural employment opportunities

PROJECT AGRICULTURE: PHASE II-B

AN EXPLORATION OF THE FEASIBILITY OF A MATHEMATICAL PROGRAMMING MODEL FOR PROJECTION OF AGRICULTURAL EMPLOYMENT BY AREAS OF AGRICULTURAL INSTRUCTION

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
252	January, 1969	Contract Phase II-B
253	March, 1969	Staff and Organize Phase II-B
254	September, 1969	Develop trial mathematical model for projection of agricultural employment opportunities
255	March, 1970	Conduct test of model by micro areas; validate by census control
256	September, 1970	Refine matrix of mathematical model
257	June, 1971	Test macro-application of model by state and economic areas
258	August, 1971	Develop proposal for continuing reporting system
259	October, 1971	Prepare and publish project report

PROJECT AGRICULTURE, MAJOR ACTIVITIES
PHASE III, A, B, C, D, E, F, G

DEVELOPMENT OF CURRICULUM FOR EACH AREA OF AGRICULTURAL INSTRUCTION
(Events Duplicate for Each Curriculum Project)

Event No.	Completion Date	Event
001	October, 1968	Start Project Agriculture
302	January, 1969	Contract Phase III - A, B, C, D, E, F, & G
303	January, 1969	Develop job description for curriculum task force staff and announce positions
304	March, 1969	Recruit, interview and staff curriculum task force
305	May, 1969	Research literature relating to curriculum development efforts
306	May, 1969	Convene panel of curriculum consultants with task force staff to establish orientation for development effort
307	June, 1969	Establish broad plan for curriculum development
308	June, 1969	Plan curriculum conference workshop
309	September, 1969	Hold curriculum conference workshop of agriculture educators, guidance personnel and industrial persons
310	September, 1969	Establish rationale and design for curriculum development for X area of agricultural instruction
311	November, 1969	Determine conceptual framework basic to X area of agricultural instruction
312	December, 1969	Develop rationale for task and performance analysis and determination of curriculum objectives
313	December, 1969	Plan operational procedures for involvement of teacher task force in determining objectives
314	January, 1970	Secure nominations of teachers to attend summer workshop on occupational task analysis

Event No.	Completion Date	Event
315	January, 1970	Contact consultant personnel to work with teacher task force
316	February, 1970	Contract for consultant personnel for summer workshop
317	February, 1970	Announce workshop and issue invitations
318	March, 1970	Arrange for location, meeting facilities reserve accommodations for teacher task force, receive registrations
319	July, 1970	Hold summer workshop of teacher task force on occupational task analysis
320	December, 1970	Plan operational procedures for teacher workshop development of curriculum materials
321	January, 1971	Secure nominations of teachers for task force workshop
322	January, 1971	Refine task analysis studies from teacher workshops
323	January, 1971	Establish performance standards for occupational tasks
324	February, 1971	Issue invitations for teachers
325	March, 1971	Arrange accommodations for teacher task force workshop and receive registrations
326	April, 1971	Develop preliminary achievement tests and evaluation instruments
327	May, 1971	Develop guidelines for teacher planning of curriculum materials
328	July, 1971	Teacher task force curriculum workshop
329	September, 1971	Plan process for trial of curriculum materials
330	October, 1971	Establish criteria for trial centers
331	November, 1971	Establish trial centers and select cooperating teacher personnel

Event No.	Completion Date	Event
332	December, 1971	Plan teacher institutes in preparation for curriculum trial
333	January, 1972	Refine curriculum materials and achievement tests in preparation for trial
334	March, 1972	Arrange accommodations for teacher institutes and receive registrations
335	April, 1972	Reproduce curriculum materials for field trial
336	July, 1972	Hold teacher institutes in preparation for pilot trial of curriculum materials
337	May, 1973	Pilot trial of preliminary curriculum
338	July, 1973	Recall teacher task force for review and refinement of curriculum materials
339	August, 1973	Reproduce curriculum materials initial dissemination
340	September, 1973	Field demonstration and promotion

PROJECT AGRICULTURE: PHASE - IV

A MECHANISM FOR CURRICULUM DISSEMINATION AND RENEWAL

Event No.	Date	Event
001	October, 1969	Start Project Agriculture.
402	January, 1973	Contract Phase IV
403	January, 1973	Develop job descriptions and announce positions for Phase IV.
404	April, 1973	Recruit, interview and staff Phase IV.
405	August, 1973	Develop broad plan for the establishment of state and regional demonstration instructional conters.
406	September, 1973	Establish instructional materials centers for each agricultural area.
407	January, 1974	Establish Curriculum Research and Development Task Force in instructional materials centers.
408	April, 1974	Establish relationship with research coordination units.
409	July, 1974	Develop rationale and provisions for coordination of demonstration centers and materials centers.
410	December, 1974	Establish procedure, process and mechanism for curriculum adjustment and renewal by instructional materials centers.

C. The Use to be Made of the Findings

The results of the completion of each of the phases of Project Agriculture has been somewhat self-evident from the descriptions of the procedures and the products of each. For the most part a major advance in developing a commonly accepted guide to curriculum for each area of agricultural instruction will have been made.

The "Taxonomy of Agricultural Occupations" and the "Handbook of Agricultural Job Descriptions" will be helpful to vocational guidance and local curriculum refinement in all of the states.

The census of agricultural employment opportunities and the periodic projection of opportunities for states and economic areas and by areas of agricultural instruction will provide a basis for determining the allocation of resources to agricultural instruction. Not only may the allocation of resources to each area of agricultural instruction be determined from the evident needs for instruction, but the character and content of instruction may be based to some extent on projections of agricultural employment.

The curriculum program guides developed for each of seven areas of agricultural instruction will become a central concern for dissemination, and for continued research development and renewal, and for curriculum materials centers which will have been designated for each area. Thus the project will have provided for the continued propagation and dissemination of suitable guides to curriculum development for vocational and technical education in agriculture.

The project will provide a model for all vocational services in the development of nationwide efforts to determine occupational opportunities and training needs. The design of a taxonomy of agricultural occupations and the multi-state effort to develop curriculum guides for areas of occupational instruction in agriculture will provide experience and example for all areas of vocational education. The project would further provide for the development of performance standards and performance tests for assessing the validity and effectiveness of instructional programs in agriculture.

IV. PERSONNEL AND FACILITIES

The Prime Contractor

The Center for Vocational and Technical Education will have responsibility for overall financial and technical performance under the prime contract between the Ohio State University and the U. S. Office of Education. Responsibility for assuring satisfaction of prime contract requirements will be implemented through a Project Agriculture Coordinating Staff. It is expected that this staff will guide the development of general policy, coordinate the activities of all phases of Project Agriculture and monitor project performance in each of the phases. The Center will thus have overall responsibility for subcontracting with appropriate agencies of research and development for the completion of specific phase sub-projects. The Center will also have responsibility for the receipt, disbursement and accounting for funds from the USOE. The principal investigator for the project will be the Specialist in Agricultural Education at The Center and together with the Center coordinating staff will give overall direction to Project Agriculture.

There are several advantages to be gained by assigning prime contractor responsibility to The Center.

> The Center is a national institution having close relationships with both the USOE and the various agencies of research and development in vocational and technical education with universities and other institutions throughout the states. The organization, procedures and resources necessary for the systems management inherent to large projects of research and development in vocational education already are established at The Center for Vocational and Technical Education. The Center was created through federal funding to stimulate and contribute to such leadership in research activities in vocational education as are represented in this proposal. In light of these considerations, The Center becomes the logical management coordinating agent for the USOE and with the widely geographically disbursed subcontracting agencies.

Center Staffing:

Principal Investigator - James W. Hensel, Specialist in Agricultural Education, The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio

Education - B.S., 1954, Iowa State College; M.S., 1959, Iowa State University; Ph. D., 1962, Iowa State University.

Experience - Instructor in the Department of Vocational Education at Iowa State University; 1962, Assistant Professor and Teacher Educator in the Department of Agricultural and Extension Education, University of Wisconsin; 1965-to date, Specialist in Agricultural Education, The Center for Vocational and Technical Education, and Associate Professor, Agricultural Education, Ohio State University; Currently serving as: Member of the Committee on Agricultural Education of the

National Research Council, Commission on Education in Agricultural and Natural Resources of the Division of Biology and Agriculture, National Academy of Sciences; Consultant to the National Advisory Committee to the Agricultural Division of the American Vocational Association; Chairman of the AVA Publications Committee for Agricultural Education; Representative on the North Central Regional Experiment Station Project NC-86; Chairman of the ad hoc Committee for Agriculture which met in conjunction with the U. S. Office of Education cooperative project for standardization of terminology in instructional programs of local and state school systems.

Associations - Phi Delta Kappa, National Vo Ag Teachers Association, American Vocational Association, American Vocational Education Research Association, American Association of Teacher Educators in Agriculture, American Educational Research Association.

Project Coordinator - Richard H. Wilson, Associate Professor of Agricultural Education, The Center for Vocational and Technical Education, The Ohio State University

Education - B. Sc., 1943, The Ohio State University; M.A., 1951, The Ohio State University; Ph. D., 1955, The Ohio State University

Experience - 1947-1950, Teacher of Vocational Agriculture; 1950-1951, Graduate Student, Ohio State University; 1951-1953, Research Fellow, Ohio State University; 1953-1959, Itinerant Teacher Educator, Agricultural Education, Ohio State University; 1959-to date, Coordinator of Field Experience, Agricultural Education, Ohio State University; 1955-to date, Instructor of Graduate Courses in Research, Evaluation, and Teacher Education; Graduate Faculty, Ohio State University; Visiting Professor, New Mexico State University; taught School Personnel Administration and Administration of Vocational Education, summer, 1965.

Associations - Vice President of American Association of Teacher Educators in Agriculture; Member of American Vocational Association, Ohio Vocational Association, American Association for Advancement of Science, Phi Delta Kappa, and Advisory Board of the ERIC Clearinghouse on Rural Education and Small Schools.

Project Director - This person would be one with experience and training in Agricultural Education at the Ph. D. level, Assistant Professor, having capabilities in research and curriculum development.

Research Associates - One half time research associates who would be pursuing the Ph. D. and have particular competence in research and curriculum development. Preferably they would have at least four years of teaching experience and be recognized as an outstanding leader.

The Project Steering Committee:

Suggestions for overall directions and policy would be provided by a steering committee composed of these persons or appropriate alternates appointed to their positions:

Mr. Linwood Bailey - U. S. Department of Agriculture

Mr. Eldon Culley - U. S. Department of Labor

Mr. H. N. Hunsicker - USOE, U. S. Dept. of HEW

Dr. Melvin Janssen - U. S. Department of Agriculture

Mr. Kenneth Norell - U. S. Department of Census, Department of Commerce

Dr. Phil Teske - Division of Adult and Voc. Res. USOE

Mr. Norman DeWeaver - Econ. Dev. Div., U. S. Dept. of Commerce

Mr. Ed Sheopner - Farm Labor Service, U. S. Dept. of Labor

The Project Executive Committee

In order to provide for overall policy development for the total effort of Project Agriculture, the entire effort will have a Project Executive Committee. This committee will provide counsel concerning policies and procedures. It is proposed that the following individuals serve on the committee:

Principal Investigator -
Project Coordinator -
Project Director -
Center Director -

The Sub Contracting Agencies

The sub contracting agencies for Project Agriculture would be institutions such as State Universities and Research Coordinating Units where unique capabilities appropriate to specific sub-project tasks would reside. For example, personnel of Pennsylvania State University have already a history of experience in the research associated with the identification of job titles and job descriptions for agricultural occupations. Such persons might well direct the work of Phase IA and B of Project Agriculture.

The work of Phase IIA is much similar to research study already accomplished for Nebraska by the Nebraska RCU under the direction of personnel at the University of Nebraska. These persons have expressed interest in the Phase IIA research.

The work of Phase IIB is a logical extension of research already carried on by Iowa State University (Contract No. OE 5-85-108). Personnel of this institution have likewise expressed interest in pursuing the Phase IIB aspect of Project Agriculture.

The Curriculum Development studies of Phase III would be most appropriately conducted by the research personnel of the Departments of Agricultural Education at various state universities. Michigan State University has already submitted a proposal relating to curriculum development in the area of Horticulture. It is believed that this and similar efforts would be effectively negotiated as subcontracts under Project Agriculture.

The Curriculum Dissemination, Research and Renewal Tasks of Phase IV would be handled by appropriate curriculum materials centers, some of which are already functional for some of the areas of curriculum. In some instances, a Curriculum Materials Center would be a natural outgrowth of the work of a university where the curriculum development had taken place. Clearer plans for this aspect of the Project will be possible after some of the curriculum development effort has gotten underway.

V - BUDGET

The total budget, summarized here, is detailed according to project phase and institutional responsibilities in the following pages:

Operation	FY 1968 - 1969 Federal	FY 1968 - 1969 Local	FY 1969 - 1970 Federal	FY 1969 - 1970 Local	Total FY 1968 1969	Total FY 1969 1970
A. Project Coordination Staff	$40,745.00	$ 800.00	$77,225.10	$ 1,600.00	$41,545.00	$78,825.10
B. Phase IA - Taxonomy of Agricultural Occupations	11,132.75	2,675.00	13,757.00	800.00	13,807.75	14,557.00
C. Phase IB - A Handbook of Agricultural Job Descriptions	- - - - -	- - - - -	59,195.50	56,600.00	- - - - -	115,795.50
D. Phase IIA - Agricultural Employment Opportunity Census	11,476.00	4,250.00	74,459.50	830.00	15,726.00	75,289.50
E. Phase IIB - Mathematical Model for Projection of Agricultural Employment	28,597.20	800.00	56,954.40	1,600.00	29,397.20	58,554.40
F. Phase IIIA, B, C, D, E, F, & G - Curriculum Development for Seven Areas of Agricultural Instruction	110,178.25	11,200.00	493,164.00	200,200.00	121,378.25	693,364.00
G. Phase IV - Curriculum Dissemination and Renewal (This Phase not activated until Jan. 1973)	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
TOTAL	$202,129.20	$ 19,725.00	$774,755.50	$261,630.00	$221,854.20	$1,036,385.50

PROJECT AGRICULTURE

PROJECT COORDINATING STAFF

		Fiscal Year Oct. 1, '68-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
I. DIRECT COSTS					
A. Personnel					
A1 - Princ. Invsgtr.	2¼ man mo. @ $16,000 yr.	$ 3,000			
Director	4½ man mo. @ $16,000 yr.	6,000			
Coordinator	6 man mo. @ $14,000 yr.	7,000			
	3 man mo. @ $17,000 yr.			$ 4,250	
	6 man mo. @ $17,000 yr.			8,500	
	12 man mo. @ $14,500 yr.			14,500	
A2 - Acct. Clerk	3 man mo. @ $5,000 yr.	1,250			
	3 man mo. @ $5,000 yr.	1,250			
	6 man mo. @ $5,000 yr.			2,500	
	6 man mo. @ $5,000 yr.			2,500	
A3 - Res. Assistant	3 man mo. @ $10,800 yr.	2,700	$400		
	3 man mo. @ $10,800 yr.	2,700	400		
	6 man mo. @ $10,800 yr.			5,400	$ 800
	6 man mo. @ $10,800 yr.			5,400	800
(Total, Salary & Wages subject to 39% Overhead)		($23,900)	($800)	($43,050)	($1,600)
A5 - Consultant	6 days @ $75 day	450			
	20 days @ $75 day			1,500	

V - A Budget Cont.

	Fiscal Year Oct. 1, '68-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
(Total Wages subject to 9% Overhead)	($ 450)		($ 1,500)	
B. Employee Benefits				
B1 - STRS $16,000 X .115	1,840			
27,250 X .1296			3,531.60	
B2 - PERS $2,500 X .09	225			
5,000 X .1044			522	
Insurance 9.75 X 6 mos.	58.50			
9.75 X 12 mos.			117	
C. Travel				
C1 - Staff 20 trips @ $150	3,000			
40 days @ $ 20	800			
40 trips @ $150			6,000	
80 days @ $ 20			1,600	
C2 - Consultants 3 trips @ $150	450			
6 days @ $ 20	120			
10 trips @ $ 150			1,500	
20 days @ $ 20			400	
C3 - Steering Committee 8 trips @ $150			1,200	
8 days @ $ 20			160	

V - A Budget Cont.

	Fiscal Year Oct. 1, '68-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
D. Supplies				
D1 - General Office	$ 225		$ 300	
E. Communications				
E1 - Telephone 75 calls @ $3	225			
100 calls @ $3			300	
E2 - Postage	90		120	
Subtotal, Direct Costs	31,383.50	800	60,300.60	1,600
K. Indirect Costs				
K1 - Salaries & Wages $23,900 X .39	9,321			
43,050 X .39			16,789.50	
K2 - Consultants & Others $450 X .09	40.50			
$1,500 X .09			135	
Total	$40,745	$800	$77,225.10	$1,600

PROJECT AGRICULTURE - PHASE I-A

TAXONOMY OF AGRICULTURAL OCCUPATIONS

V-B Budget

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69- Dec. 31, '69 Federal	Local
I. DIRECT COSTS				
A. Personnel				
A1 - Director - 1½ man mo. @ $15,000/yr.		$1,875.00		
1½ man mo. @ $15,000/yr.			$1,875.00	
A2 - Clerk Typist - 3 man mo. @ $5,000/yr.	$1,250.00			
3 man mo. @ $5,000/yr.			1,250.00	
A3 - Res. Asst. - 3 man mo. @ $10,800/yr.	2,700.00	400.00		
3 man mo. @ $10,800/yr.	2,700.00	400.00		
3 man mo. @ $10,800/yr.			2,700.00	$400.00
3 man mo. @ $10,800/yr.			2,700.00	400.00
(Total Salaries & Wages Subject to 39% Overhead)	($6,650.00)		(8,525.00)	
A5 - Consultants - 10 days @ $75/day	750.00		750.00	
B. Employee Benefits				
B2 - PERS - 1250 x .09	112.50			
Insurance $9.75 x 3 mo.	29.25		29.25	
1250 x 10.44			130.50	

V-B Budget Con't.

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-Dec. 31, '69 Federal	Local
C. Travel				
C1 - Staff - 3 trips @ $150/trip	$ 450.00		$ 450.00	
6 days @ $20/day	120.00		120.00	
D. Supplies				
D1 - General Office	150.00		150.00	
E. Communications				
E1 - Telephone - 50 calls @ $3/call	150.00		150.00	
E2 - Postage	60.00		60.00	
SUBTOTAL, DIRECT COSTS	$8,471.75	$2,675.00	$10,364.75	$800.00
K. Indirect Costs				
K1 - Salaries & Wages - $6,650 x .39	2,593.50			
$8,525 x .39			3,324.75	
K2 - Consultants & Others - $750 x .09	67.50		67.50	
TOTAL	$11,132.75	$2,675.00	$13,757.00	$800.00

V-C Budget

PROJECT AGRICULTURE - PHASE I-B

A HANDBOOK OF AGRICULTURAL JOB DESCRIPTIONS

	Fiscal Year Jan. 1, '69-June 30, '69		Fiscal Year July 1, '69-June 30, '70	
	Federal	Local	Federal	Local
I. DIRECT COSTS				
A. Personnel				
A1 - Director 12 man mo. @ $15,000/yr.			$15,000	
A2 - Clerk Typist 12 man mo. @ $5,000/yr.			5,000	
A3 - Res. Assistant 6 man mo. @ $10,800			5,400	800
6 man mo. @ $10,800			5,400	800
A5 - Consultants - 10 days @ $75/day			750	
A6 - Other; State Coordinators - 50 @ 2 day ea.				5,000
Survey Personnel 250 x $200 ea.				50,000
B. Employee Benefits				
B1 - STRS - $15,000 x .1296			1,944	
B2 - PERS - 5,000 x .1044			522	
C. Travel				
C1 - Staff - 10 trips @ $150/trip			1,500	
30 days @ $20/day			600	
C4 - Other - State Coord. - 50 trips @ $150/trip			7,500	
100 days @ $20/day			2,000	

V-C Budget

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
D. Supplies				
D1 - General Office			$ 300	
E. Communications				
E1 - Telephone - 100 calls @ $3/call			300	
E2 - Postage			300	
F. Services				
F1 - Duplication - 12,000 pc. @ 5¢/p			600	
J. Total Direct			$47,116	
K. Indirect Costs				
K1 - Salaries & Wages - $30,800 x .39			12,012	
K2 - Consultants & Other - $750 x .09			67.50	
TOTAL			$59,195.50	$56,600

V-D Budget

PROJECT AGRICULTURE - PHASE II-A

NATIONAL EMPLOYMENT OPPORTUNITY SURVEY

	Fiscal Year Jan. 1 '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
I. DIRECT COSTS				
A. Personnel				
A1 - Director - 3 man mo. @ $15,000 yr.		$3,750.00		
12 man mo. @ $15,000 yr.			$15,000.00	
A2 - Clerk Typist - 3 man mo. @ $5,000 yr.	$1,250.00			
6 man mo. @ $5,000 yr.			2,500.00	
A3 - Grad. Res. Asst. - 3 man mo. @ $10,800 yr.	2,700.00			
3 man mo. @ $10,800 yr.	2,700.00			
6 man mo. @ $10,800 yr.			5,400.00	
6 man mo. @ $10,800 yr.			5,400.00	
(Total, Salary & Wages subject to 39% OH)	($6,650.00)		($28,300.00)	
A5 - Consultants (Local) 5 days @ $100		500.00		
10 days @ $75/day			750.00	
5 days @ $100/day				$500.00
B. Employee Benefits				
B1 - STRS - 15,000 x .1296			1,944.00	
B2 - PERS - 2,500 x .1044			261.00	
1,250.00 x .09 = 112.50		112.50		

V-D Budget Con't.

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
C. Travel				
C1 - Staff - 8 trips x $150	$1,200.00			
16 days @ $20/day	320.00			
16 trips @ $150/trip			$2,400.00	
32 days @ $20/day			640.00	
D. Supplies & Materials				
D1 - Gen. Office	150.00		300.00	
D2 - Special Materials - Survey forms 200,000 @ 1¢			2,000.00	
E. Communications				
E1 - Telephone 50 calls @ $3/call	150.00		300.00	
E2 - Postage Questionnaire	300.00		24,000.00	
F. Services				
F3 - Computer Services - 3 hrs. @ $5.50/min.			660.00	330.00
F4 - Data Processing - 600 hrs. @ $3.00/hr.			1800.00	
SUBTOTAL DIRECT COSTS	$8,882.50	$4,250.00	$63,355.00	$830.00

V-D Budget Con't.

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
K. Indirect Costs				
K1 - Salaries & Wages - 6650 x .39 28,300 x .39	$2,593.50		$11,037.00	
K2 - Consultants & Other - 750 x .9			67.50	
TOTAL COSTS	$11,476.00	$4,250.00	$74,459.50	$830.00

V-E Budget

PROJECT AGRICULTURE - PHASE II-B

AN EXPLORATION OF FEASIBILITY OF MATHEMATICAL MODEL FOR PROJECTION OF AGRICULTURAL EMPLOYMENT

	Fiscal Year Jan. 1, '69-June 30, '69		Fiscal Year July 1, '69-June 30, '70	
	Federal	Local	Federal	Local
I. DIRECT COSTS				
A. Personnel				
A1 - Director 6 man mo. @ $15,000 yr.	$ 7,500			
12 man mo. @ $15,000 yr.			$15,000	
A2 - Clerk Typist 6 man mo. @ $5,000 yr.	2,500			
12 man mo. @ $5,000 yr.			5,000	
A3 - Res. Asst. 3 man mo. @ $10,800 yr.	2,700	$400		
3 man mo. @ $10,800 yr.	2,700	400		
6 man mo. @ $10,800 yr.			5,400	$ 800
6 man mo. @ $10,800 yr.			5,400	800
A4 = Computer Programmer 3 man mo. @ $12,000 yr.	3,000			
6 man mo. @ $12,000 yr.			6,000	
(Subtotal Salaries & Wages subject to 39% Overhead)	($18,400)	($800)	($36,800)	($1,600)

V-E Budget

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
B. Employee Benefits				
B1 - STRS $15,000 x .1296 x ½ / $15,000 - 12 mos.	$ 972		$ 1,944	
B2 - PERS $ 5,000 x .1044 x ½ / $ 5,000 - 12 mos.	261		522	
B2 - PERS $12,000 x .1044 x 1/6 / 12,000 - 6 mos.	313.20		626.40	
C. Travel				
C1 - Staff 3 trips @ $150	450			
8 days @ $ 20	160			
8 trips @ $150			1,200	
16 days @ $ 20			320	
D. Supplies				
D1 - General Office	300			
E. Communications				
E1 - Telephone 30 calls @ $3	90			
80 calls @ $3			240	
E2 - Postage	100		200	

V-E Budget

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
F. Services				
F1 - Computer (7094; 1 hrs.@ $375) 2 hrs. @ $375	$ 375		$ 750	
J. Total Direct Costs	$21,421.20	$800	$42,602.40	$1,600
K. Indirect Costs				
K1 - Salaries & Wages @ 39	7,176		14,352	
Total	$28,597.20	$800	$56,954.40	$1,600

V - F Budget

PROJECT AGRICULTURE - PHASE III

DEVELOPMENT OF CURRICULUM FOR ONE AREA OF AGRICULTURE INSTRUCTION
(Budget Duplication for Each Career Project)

	Fiscal Year Jan 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
I. Direct Costs				
A. Personnel				
A1 - Director 3 man mo. @ $15,000 yr.	$ 3,750			
12 man mo. @ $15,000 yr			$ 15,000	
A2 - Clerk Typist - 3 man mo. @ $5,000 yr.	1,250			
12 man mo. @ $5,000 yr.			5,000	
A3 - Grad. Res. Asst. - 3 man mo. @ $10,800 yr.	2,700	$ 400		
3 man mo. @ $10,800 yr.	2,700	400		
6 man mo. @ $10,800 yr.			5,400	$ 800
6 man mo. @ $10,800 yr.			5,400	800
(Total, Subject to 39% OH)	($ 10,400)	($ 800)	($ 30,800)	($ 1600)
A6 - Other - Curriculum Const. 2 mo. @ $15,600 yr.			2,600	
Teachers in Workshop 25 @ $100 wk. 6 wks.			15,000	
Teachers in Workshop 6 wks. @$180 wk. X 25				27,000
(Sub Total Consultants & Other)			($ 17,600)	($ 27,000)

V - F Budget Cont.

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
B. Employee Benefits				
B1 STRS 3750 X .115	$ 431.25		$ 1,944	
STRS 15,000 X .1296				
B2 PERS 1250 X .9	112.50		$	
PERS 5,000 X .1044			522	
C. Travel				
C1 - Staff 2 trips @ $150	300			
4 days @ $20	80			
8 trips @ $150/trip			1,200	
16 days @ $20/day			320	
C4 - Other Participating Teacher 1 trip @ 150 X 25			3,750	
D. Supplies				
D1 - General Office	150		300	
E. Communications				
E1 - Phone 50 calls @ $3/call	150			
100 calls @ $3/call			300	
E2 - Postage	60		120	

V - F Budget Cont.

	Fiscal Year Jan. 1, '69-June 30, '69 Federal	Local	Fiscal Year July 1, '69-June 30, '70 Federal	Local
J. Subtotal, Direct Costs	$ 11,683.75	$ 1,600	$ 56,856	$ 28,600
K. Indirect Costs				
K1 - $10,400 X .39	4,056			
30,800 X .39			12,012	
17,600 X .09			1,584	
Total	$ 15,739.75	$ 1,600	$ 70,452	$ 28,600
Seven X One	$110,178.25	$11,200	$493,164	$200,200

VI Appended Items

Other Information

(a) This is a new proposal and has not been previously submitted to the U. S. Office of Education or elsewhere.

(b) Previous communication concerning this project has been carried on with Dr. Phil Teske, Division of Adult and Vocational Research, U. S. Office of Education.

Report of Other Projects

This project proposal amounts to a document which brings to completion and fulfills the requirements of previous project USOE BR 7-8459, A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry.

OFFICIAL ABSTRACT

Proposal Number: 7-8459

Recommended Funding Authority: Title IV, P.L. 89-10, Elementary and Secondary Education Act as Amended

Title: A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-Farm Agricultural Business and Industry

Principal Investigator: James W. Hensel, Specialist, Agricultural Education
The Center for Vocational and Technical Education

Institution: The Center for Vocational and Technical Education
The Ohio State University, 980 Kinnear Road, Columbus, Ohio

Duration: 5 months Total Federal Funds: $9,655 FY '67 Funds: $9,655

OE Project Officer: Dr. Philip Teske Telephone Extension: 36629

Purpose of Project:

The major purpose of the study is to plan and coordinate a nationwide study to determine the employment opportunities and training needs in farming and off-farm agricultural business and industry. The planning study will enlist the combined efforts of the U. S. Departments of Agriculture, Commerce, and Labor; Office of Education and leaders in the field of Agricultural Education in developing a long-range project for education in Agriculture.

Contribution to Education:

The project will provide the background, coordination, and design for a massive attack on the growing problem of the identification of employment opportunities and training needs in farming and off-farm agricultural businesses and industry. The project will build a framework for coordinating the educational efforts of several U. S. Departments, teacher educators, and supervisors with agricultural business and industrial firms. The success of the developmental project will be measured in terms of the design, funding, and operation of the national study.

Procedures:

A review of the literature will be conducted. An Advisory Committee of representatives from the Departments of Agriculture, Commerce, Labor, Office of Education, agricultural educators and others will assist the principal investigator in designing the national study. The principal investigator will work with all of the agencies to be involved in the national study. His efforts will be to coordinate activities on all levels, establish guidelines for the conduct of the study, and to design and submit a proposal for the major project concerning employment opportunities and training needs in Agriculture.

Mr. Hensel

IN REPLY REFER TO

U.S. DEPARTMENT OF LABOR
BUREAU OF EMPLOYMENT SECURITY
WASHINGTON 25, D.C.

UNITED STATES EMPLOYMENT SERVICE

UNEMPLOYMENT INSURANCE SERVICE

JAN 23 1967

Mr. H. N. Hunsicker
Chief
Agricultural Education
Department of Health, Education
and Welfare
Washington, D. C. 20202

Dear Mr. Hunsicker:

This is to advise that Eldon Cully will represent the Department of Labor, Bureau of Employment Security, Office of Farm Labor Service, on the Steering Committee being established for a cooperative, nation-wide study of the occupational opportunities and training needs in agriculture and agribusiness.

Mr. Cully's experience in developing a similar project in California, and the preliminary work he has done with interested parties in planning this nation-wide study, should be an asset to the Steering Committee.

We are placing high value on this project in terms of identifying both the current and projected needs of our rapidly changing agricultural and agribusiness industries. The ultimate results will be of great value to our agency in establishing guidelines for our future service to rural area people.

Sincerely yours,

Tod Potter

Tod Potter
Director
Office of Farm Labor Service

Copy to:
Mr. Hensel

JAN 25 1967

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

TO : Edward K. Smith
Deputy Assistant Secretary
for Economic Policy

DATE: NOV 17 1966

In reply refer to:

FROM : Ross D. Davis
Assistant Secretary and
Director of Economic Development

SUBJECT: Steering Committee on Training for Work Related to Agriculture

I hereby designate Dr. John H. Nixon, Assistant Administrator for Technical Assistance, to represent EDA, and Commerce Department, on the interagency working group to review the training needs for occupations relating to "the broad field of agriculture, business and industry," established by the Office of Education under the Vocational Education Act.

I will be happy if you will transmit Dr. Nixon's name to Dr. Hunsicker of the Office of Education.

BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN

DEPARTMENT OF AGRICULTURE

OFFICE OF ASSISTANT SECRETARY

WASHINGTON, D.C. 20250

March 10 1967

MEMORANDUM

To: Walter M. Arnold, Assistant Commissioner for Vocational and Technical Education, Office of Education, DHEW

From: John A. Baker, Assistant Secretary

Subject: "Employment Opportunities and Training Needs in Agriculture" -- USDA Representatives on the Steering Committee for the Research Proposal

We congratulate you for your efforts to improve vocational education curriculum to meet present need. We welcome the opportunity to cooperate with you in this activity.

I should like to name Mr. Linwood K. Bailey of our Agricultural Stabilization and Conservation Service and Dr. Melvin R. Janssen of our Economic Research Service to represent this Department in your work. They may call on other staff within the Department for help as needed. Mr. Bailey's extension is 111-3865; feel free to get in touch with him directly.

Members
Steering Committee
Survey of Projected Employment Opportunities and Training Needs in Agriculture

Mr. Linwood Bailey
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Project Agriculture
Ad Hoc Committee Meeting
Room 5636
GSA Building
U. S. Office of Education

March 28, 1968

Persons In Attendance

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